

Pterocles arenarius. Sand-Grouse.

Inhabits the drier parts of the plain in large numbers, and is much sought after for food.

Caccabis chucar. Chukar Partridge.

Was observed occasionally, and in winter could be met with on the fortifications. In the coldest months they are sometimes so emaciated that they can be caught by hand.

Coturnix coturnix. Quail.

A few were observed during the month of May and from the first days of August till early in September.

II.—*Notes on Birds observed in the North Sea and North Atlantic Ocean during the Autumn and Winter of 1914.*

By Lieutenant J. N. KENNEDY, R.G.A., M.B.O.U.

THE observations given in the following paper were made over a wide area of the North Sea and North Atlantic Ocean, extending northward to the Faroes, eastward to the Norwegian coast, westward beyond St. Kilda, and southward as far as the Heligoland Bight.

It will be seen that the number of species met with was influenced not only by locality but by weather conditions, this point being well illustrated between the 5th and 9th of November when we were patrolling some forty miles from the island of St. Kilda, during the approach of a gale.

The noon position on each day is given, and I have added notes on the weather which may prove of interest in connection with the other observations.

The nomenclature adopted is that of the B. O. U. List of British Birds, 1915.

4 August—9 August. Between these dates no systematic notes were made. The only species of interest observed was the Great Skua (*Catharacta skua*), one of which followed the ship on several occasions during a spell of calm weather. We were at that time in the vicinity of the Orkneys.

10 *August.* Sunny ; light breeze S.-S.W. $58^{\circ} 5' N.$,
 $1^{\circ} 01' E.$

Herring-Gulls (*Larus argentatus*) and Lesser Black-backed Gulls (*Larus fuscus affinis*) were numerous in our wake all day. Three Gannets (*Sula bassana*), one of which was immature, followed the ship for two hours. A few Fulmars (*Fulmarus glacialis*) and Razorbills (*Alca torda*) were seen at a distance.

15 *August.* Sunny ; light airs N.E.-N.W. $58^{\circ} 20' N.$,
 $2^{\circ} 15' E.$

Numerous Razorbills with young were passed. The hoarse croaking calls of the parent birds and the musical whistling answers of the young ones were frequently heard as they dived in alarm at the approach of the ship. In no case have I seen a young Razorbill at sea attended by more than one of its parents. Four or five Fulmars followed us all day.

24 *August.* Sunny and calm. Cromarty Firth.

Hundreds of Herring-Gulls, and smaller numbers of Lesser Black-backed Gulls and Black-headed Gulls (*Larus ridibundus*) were seen in the Firth. There were also a few full-grown young Herring-Gulls of the year, which were conspicuous by their curious crouching attitude in the water and by their clumsy, tentative flights.

26 *August.* Foggy, with intervals of sunshine ; light airs S.E.-S.W. $58^{\circ} 1' N.$, $2^{\circ} 47' E.$

The surface of the sea for many miles teemed with Razorbills and their young, and, even at night, we frequently heard their hoarse cries followed by the sleepy notes of the baby birds. A Wheatear (*Enanthe enanthe*), somewhat exhausted, appeared on board in the afternoon, 150 miles from land.

1 *September.* Calm ; some rain ; light airs S.W.-S. $58^{\circ} 15' N.$, $1^{\circ} 44' W.$

Great numbers of Fulmars were seen from time to time in companies of five to twenty, while many followed in our wake.

11 *September*. Colder, overcast; fresh breeze S.S.W.-W.
57° 55' N., 2° 11' W.

A few Fulmars and a couple of Gannets following the ship were the only birds seen.

18 *September*. Stormy, wind N.N.W.-N.W. 56° 26' N.,
0° 51' E.

Numbers of Fulmars, Kittiwakes (*Rissa tridactyla*), and a few Herring-Gulls followed us all day.

20 *September*. Stormy, wind N.E.-N.N.W. 56° 26' N.,
0° 30' E.

About a score of Fulmars and a dozen Kittiwakes followed us all day. One Gannet joined them for a short time, and later a Richardson's Skua (*Stercorarius parasiticus*), which approached the ship closely more than once, in pursuit of the Kittiwakes.

21 *September*. Cold; heavy seas; fresh breeze N.N.E.-W.
56° 10' N., 0° 9' E.

There was the usual following of Fulmars and Kittiwakes, and at one time half a dozen Gannets. At intervals a Richardson's Skua, possibly the bird of the previous day, appeared astern and chased the gulls, which always shook off their pursuer by seeking sanctuary in the vicinity of the quarter-deck.

23 *September*—25 *September*. Cromarty Firth.

Thousands of Herring-Gulls, and large numbers of Lesser Black-backed and Black-headed Gulls were in the Firth. A Cormorant (*Phalacrocorax carbo*) was seen flying seawards with its beak held wide open.

26 *September*. Fresh breeze W.-N.W.; showers. 58° 11' N.,
2° 05' W.

We left harbour in the morning. Before we were out of sight of land we were being followed by a few Kittiwakes and Fulmars, the latter increasing in numbers as the land was left farther astern.

27, 28, 29 *September.* Storm from N.W. $58^{\circ} 31' N.$,
 $1^{\circ} 14' E.$; $58^{\circ} 50' N.$, $1^{\circ} 26' E.$; $59^{\circ} 56' N.$, $4^{\circ} 40' E.$

On the first and second days of this gale we were followed by about a dozen Fulmars and the same number of Kittiwakes. A few Storm Petrels (*Thalassidroma pelagica*) were observed on both days. The only other bird seen was a Gannet in the distance on the evening of the 28th.

On the third day all the birds had disappeared, nor were any seen until the evening, when one or two Fulmars began to follow.

30 *September.* Calmer, cold, showery; wind N.W.—W.S.W.
 Position as for 29th.

About a score of Fulmars followed us all day, and during the forenoon there were also a few Kittiwakes.

3 *October.* Warmer; fresh breeze W. by N.—N.W. Near
 Kinuaird Head.

Before we were out of sight of land I distinguished with my binoculars two Storm Petrels flying far astern. Within ten to fifteen miles of the land Gannets were numerous, singly and in small companies of three or four; and within the same area there were also small numbers of Herring-Gulls, Common Gulls (*Larus canus*), and Kittiwakes. Two Richardson's Skuas approached the ship while close to the land. Some companies of small divers were seen on the wing in the distance.

4 *October.* Showery; fresh breeze N.W. by W.—N.
 $58^{\circ} 33' N.$, $4^{\circ} 37' E.$

Over one hundred Fulmars were in our wake all day, and also a few Kittiwakes. Some Gannets were seen from time to time in the distance.

5 *October.* Much rain; light breeze N.W.—S.—N.N.W.—N.E.
 by N. $58^{\circ} 52' N.$, $4^{\circ} 03' E.$

On this day we had the same large following of Fulmars and a few Kittiwakes. One Lesser Black-backed Gull (subsp. ?), a few Herring-Gulls, and some Gannets were

also seen. A small number of Guillemots (*Uria troille*) and Razorbills was noticed. A Wheatear (*E. œnanthe*) flew on board in the afternoon.

6 October. Warm sunshine; fresh breeze N.E.-N. 58° 53' N., 4° 10' E.

We sighted land (Norway) from time to time during the day. Except for a short time in the forenoon, when one or two Fulmars and several Kittiwakes were following, we had no birds in our wake. One young Guillemot was passed in the evening.

7 October. Drizzling rain and fog; light wind W. by S.-N., 59° 1' N., 4° 45' E. (still within sight of Norway).

No birds whatever were seen except a couple of Kittiwakes.

8 October. Calm; fog at intervals. 59° 25' N., 4° 24' E. (within sight of Norwegian coast nearly all day).

Three or four Fulmars followed us for an hour in the forenoon, but disappeared later. Numerous companies (up to ten birds) of Guillemots and Razorbills were passed.

9 October. Very calm and clear; warm sunshine. 59° 12' N., 4° 33' E. (within 12 to 15 miles of Norwegian coast all day).

Two Fulmars were seen astern just after dawn, but they had disappeared after 8 A.M. No other birds followed us except two Kittiwakes at intervals and a Herring-Gull. Guillemots, Razorbills, and Puffins (*Fratercula arctica*) were very numerous in companies of from four to ten. They had not been previously seen in such numbers. This may have been due to the difficulty of observation in broken water or perhaps to the greater distance from land.

While watching a Puffin through my glasses, I suddenly saw the periscope of a German submarine appear above the water close to the bird. We altered course just in time to evade, by a few feet, two torpedoes which were fired at us! We tried to ram the submarine, but unfortunately she dived too quickly.

10 *October.* Calm and warm until the afternoon, when a fresh breeze arose, S.E.—S.S.W. 59° 38' N., 3° 11' E.

We were further from the land to-day, and few birds were observed. One or two Fulmars were with us from time to time. I observed one of these birds zigzagging methodically across our broad wake and alighting on the water whenever it espied a morsel of food. In calm weather the Fulmars never seem to beat the water with their feet. One or two Gannets were seen in the distance. Guillemots, Razorbills, and Puffins were still numerous, but there were not quite so many as on the preceding day. A few Kittiwakes were in our wake occasionally.

In the afternoon a male Chaffinch (*Fringilla œlebs*) appeared, and began to search, as if for food, on the quarter-deck. I brought up some crumbs, which were evidently found to its satisfaction, for it held up its head and loudly uttered call-notes several times. Meeting with no response, it flew off to the forward part of the ship, and in about five minutes returned with its mate, when they began to feed together. We were just out of sight of land at this time.

15 *October.*

There was no change in the number of gulls at Cromarty. Two Greater Black-backed Gulls (*Larus marinus*) were also seen.

16 *October.* Cloudy, rather cold, calm; light wind S.E.—S.W. 59° 53' N., 0° 33' E.

No birds were seen during the forenoon except a few Kittiwakes. In the afternoon there were about a dozen Fulmars and twenty Kittiwakes, one of the latter being an immature bird which continually uttered a low piping note.

One Hedge-Sparrow (*Accentor modularis*), one Goldfinch (subsp. ?), and two Blackbirds (*Turdus merula*) were flying round the ship at noon.

17 *October.* Cold, calm; light wind S.W.—S.E. 61° 51' N., 0° 32' E.

About twenty Fulmars and a few Kittiwakes followed all

day. A few Guillemots, Razorbills, and Puffins were seen from time to time.

Numbers of small birds resting on board (Robins, Blackbirds, Chaffinches) were reported by the officers, but identification is unreliable.

18 *October*. Cold, foggy at intervals, light wind W. by S.—S. $61^{\circ} 33' N.$, $2^{\circ} 04' W.$

There were more Fulmars (about forty) and a few Kittiwakes in our wake all day.

About noon a Pomatorhine Skua (*Stercorarius pomarinus*) flew across our track.

Small numbers of Guillemots and Razorbills were seen occasionally, and several of both species were seen to fly up from astern, and, having overtaken the ship, to alight in the water near by.

19 *October*. Cold, calm, bright; light wind N. by W.—S.W. $61^{\circ} 52' N.$, $2^{\circ} 28' W.$

A few Fulmars and Kittiwakes were following in the morning. About noon (the men's dinner hour) the number of Fulmars increased until we had seventy or eighty astern. Towards evening most of them had disappeared. Two immature Herring-Gulls were seen about noon. At this time two Richardson's Skuas of the dark form appeared and frequently gave chase to the Gulls, but I did not observe them molesting the Fulmars. The Skuas occasionally alighted upon the water to feast upon some dainty morsel, but they never joined the parties of Fulmars which were left behind occasionally, swimming round some floating fragments of food. A few Guillemots, some of which were on the wing, were also seen.

Several Redwings (*Turdus iliacus*) were seen about noon and later, flying round and round the ship, unwilling, apparently, to alight; and a small wader, which did not approach closely enough for identification, circled round us at a distance for some time.

20 October. Cold ; fresh breeze S.S.W.-S. $62^{\circ} 0' N.$,
 $1^{\circ} 34' W.$

At daybreak no birds whatever were in sight. A few Fulmars and Kittiwakes appeared later, and shortly after midday many more Fulmars, until we had sixty in our wake. Towards evening most of them had disappeared again. One or two Guillemots on the wing, and one Richardson's Skua in the distance, were also observed.

About 4 P.M. a Great Skua was following the ship. He chased the Gulls continually, doubling and twisting with much address in their pursuit, but he did not molest the Fulmars, although the latter exceeded the Gulls in number. From time to time he would alight upon the water to seize a piece of refuse, and, rising again, would overtake the ship with a few beats of his powerful wings.

21 October. Bright ; wind increased in the afternoon
 S. by E.-S.W.-S.E. by S. $61^{\circ} 50' N.$, $2^{\circ} 02' W.$

We had the usual following of Fulmars and Kittiwakes, which increased about midday and decreased again before darkness. Two Manx Shearwaters (*Puffinus puffinus*) followed us for some time in the afternoon. The peculiar rolling flight of these birds made them easily distinguishable amongst the others. Frequently they made excursions of five or six hundred yards outwards from our wake, but, although I watched them for nearly an hour, I did not observe them seize one morsel of food. One Guillemot was seen.

22 October. Gale from N.W. (near Shetlands).

Shortly after daylight we were in the lee of the land, which was some seven miles distant. Three or four Kittiwakes were the only followers, and later a single immature Gannet was noticed.

As we entered harbour I saw some sixty Shag (*Phalacrocorax graculus*) taking shelter from the gale in a small field.

24 *October*. Sunny, calm; light breeze S.E. by E.—N.E. by N. $60^{\circ} 31' N.$, $2^{\circ} 30' W.$

Large numbers of Shag were still frequenting the grassy slopes near the sea. Eight or nine Eiders (*Somateria mollissima*), and many Herring-Gulls and Common Gulls, were also seen near the land.

At noon, when we were thirty or forty miles from land, only three Kittiwakes were following the ship; but two hours later the first Fulmars appeared, and by the evening twenty were flying astern.

25 *October*. Sunny; choppy sea; wind S. by E.—S.E. $62^{\circ} 39' N.$, $8^{\circ} 17' W.$

About fifty or sixty Fulmars accompanied us to-day, but no Gulls were seen with the exception of three or four Kittiwakes in the afternoon. One Maux Shearwater was observed in the distance.

26 *October*. Cloudy, cold; long swell; wind S.E. by S.—S.W. $62^{\circ} 11' N.$, $8^{\circ} 25' W.$

Some Fulmars appeared shortly after daylight, and more during the forenoon, until at midday nearly one hundred were following the ship. On this day a remarkably large number of Maux Shearwaters was encountered. At one time there were over twenty flying amongst the Fulmars astern, whilst forty or fifty others skimmed the waves round the ship. Apart from their rolling flight, this species can be readily distinguished at a distance by the peculiar attitude while in the air, the wings being depressed somewhat below the level of the body. I did not see the Shearwaters feeding on any occasion; in this they differed from the Fulmars, which were constantly alighting and being left far astern.

Two Glaucous Gulls (*Larus glaucus*) were in sight for a few minutes just before noon, flying slowly and close to the waves.

A Great Skua accompanied us for an hour in the afternoon, feeding on the refuse thrown overboard. He occasionally chased a Kittiwake which got in his way, but the Gulls were not feeding at the time and were not further molested.

A Black Guillemot (*Uria grylle*) attracted my attention about 1.30 P.M. It accompanied us for some time, flying up from astern every few minutes, swiftly passing us and circling round the bows, only to alight a short distance behind us. I saw this manœuvre repeated at least a dozen times.

27 October. Cloudy ; long swell ; wind S. $60^{\circ} 34' N.$,
 $3^{\circ} 02' W.$

This morning we were steaming at 17 knots, and it was evident that the Fulmars had to exert themselves more than usual in order to keep pace with us. From previous observations I had formed the opinion that the Fulmars never followed the ship after land was sighted ; but to-day, when we were two miles from the Shetlands, about 3 P.M., a dozen of these birds were still in our wake. They gradually dropped off until all of them had disappeared within about one mile of the land.

Near the land there were great numbers of Shag, Herring-Gulls, and Lesser Black-backed Gulls, and a few Guillemots and Razorbills.

29 October. Slight swell, sunny and warm ; light breeze
N.N.W.—S.E. $62^{\circ} 13' N.$, $0^{\circ} 10' E.$

In the morning a few Fulmars were following, and at noon I saw numbers flying close to the waves ahead of and on both sides of the ship, but not so many as had been met with north of the Faroes. Two Manx Shearwaters were also seen occasionally. One of these birds was seen to alight and devour a fragment of food, and while it remained on the water—for quite one minute—the wings were held uplifted as if in readiness for flight.

30 October. Slight swell ; wind S.S.W.—S. $61^{\circ} 2' N.$,
 $1^{\circ} 28' W.$

On this day we patrolled within twenty to twenty-five miles of the Shetlands, which were visible to the southward.

Fulmars were scarce, only three or four being met with. Hundreds of Herring-Gulls, a few Kittiwakes, and one Lesser Black-backed Gull were also seen.

4 November. Choppy sea; a little rain occasionally; wind S.E.-E. $60^{\circ} 14' N.$, $3^{\circ} 3' W.$

From ten to twelve Fulmars, three Kittiwakes, and two Herring-Gulls were the only birds seen.

5 November. Calmer; showers; wind S.-E. by S. $58^{\circ} 26' N.$, $8^{\circ} 48' W.$

A dozen Fulmars and a few Kittiwakes followed the ship all day.

On 6 November we were in the same place. The Fulmars increased in numbers to twenty-five, and one Richardson's Skua was also seen near St. Kilda.

On 7 November the wind freshened here from S.-S.W. Fulmars and Kittiwakes became more numerous towards noon. A few Herring-Gulls, one Lesser Black-backed Gull, and one Richardson's Skua (a very dark example) were also seen. Two Manx Shearwaters passed just after dawn, and they were again observed some hours later.

On 8 November the wind increased from W. by N.-S.W., and the sea was choppy. Fulmars increased still more in numbers until we had over forty in our wake, while many others were seen at a distance. One Richardson's Skua, two Herring-Gulls, and one Lesser Black-backed Gull were also observed.

On 9 November the wind had increased to a gale S.W.-W.N.W., and there were heavy seas. On this day we had from sixty to seventy Fulmars with us, and a few Kittiwakes were also noticed.

The flight of the Fulmar is most graceful in a strong wind. With wings motionless and rigidly outstretched they sail into the wind close to the surface of the water; then, when they have lost their momentum, they suddenly beat the slope of an oncoming wave, and, leaving a little track of flying spray, they shoot forward and rise once more into the air.

I have several times, during a gale, observed a Herring-Gull to beat the water with its feet in a manner similar to

that of the Fulmar, in order to aid it to rise above the waves.

On 19 November an immature Glaucous Gull was seen off Kinnaird Head. It followed us for a short time, chasing the Kittiwakes occasionally.

24 November. Calm, rather cold. Heligoland Bight.

Birds were almost as conspicuous by their absence in the Bight as the enemy's ships of which we were in search.

An occasional Kittiwake, two Gannets in the distance, and one or two Guillemots and Razorbills were the only birds observed.

III.—*A little-known Bird Colony in the Gulf of Mexico.*

By Lieutenant J. N. KENNEDY, R.G.A., M.B.O.U.

THE Alacran Reefs lie in latitude 22° 30' N. and longitude 89° 30' W. in the mouth of the Gulf of Mexico, some ninety miles north of the coast of Yucatan. The reefs form a large, roughly elliptical ring, inside which are numerous heads of coral with intermediate veins of deep water. Many parts of the reefs are awash, whilst on others grass and samphire grow luxuriantly.

In May 1912 I paid a short visit to the reefs, in the course of which I had an opportunity of landing on two small islands at the southern extremity, called respectively Pajaros Island and Chica Island, where the bird-colony which forms the subject of the present paper is situated.

On May 19 I had noticed small parties of Sooty Terns returning to the islands from the calm waters inside the reef, where they had been fishing. During the night, which was sultry, there seemed to be little sleep in the colony, for the faint high-pitched murmur of many bird-voices came to us continuously over the water.

On the afternoon of the 20th of May we arranged an expedition to the islands which lay some considerable